

DETAILED ACTION

Examiner's Amendment

1. During telephone conversation with Kenneth R. Eiferman (Reg. No. 57,647), Attorney for the Applicants on October 7, 2008 authorizations for this Examiner's amendment was given in a telephone interview.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicants, an amendment may be filed as provided by 37 CFR1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims,

43. (Currently Amended) A method for client mastered replication comprising:
- receiving a selection of a master file on a master client device;
 - defining a replication property of the file to indicate its selection for replication;
 - receiving a selection of at least one replication option for the master file, wherein ~~the~~ each replication option is a replication level option indicating an associated portion of the master file to be replicated and wherein each replication option is associated with a security option for controlling replication of the associated portion of the master file, wherein the associated portion of the master file is indicated on a paragraph by paragraph level, a section by section level or a page by page level;
 - creating a first replica file on the server device based upon the master file in conformance with the at least one replication option;

~~upon an event that~~ when the first replica file is ~~one of~~ created ~~and~~ or deleted, providing a notification to a user, wherein the notification is display of an icon or removal of an icon;

receiving at least one change made to the master file;

upon an event, synchronizing changes made at the master file to the first replica file;

applying a server mastered replication scheme to the replica file on the server with respect to each of at least one replicating client device; and

synchronizing the first replica file on the master client device to the master file on the master client device using a conflict resolution scheme.

44. (Currently Amended) The method of claim 43, wherein the server mastered replication scheme comprises:

replicating the first replica file to ~~[[a]]~~ each of at least one second replica file respectively on each of the at least one replicating client devices;

receiving at least one change made to a second replica on an associated replicating client;

replicating the at least change on the associated replicating client to the replica on the server.

47. (Currently Amended) The method of claim 43, wherein the event is ~~one of~~:
an expiration of a time interval ~~and~~ or a request from the server.

49 – 55 and 58 (Cancelled)

59. (Currently Amended) A computer readable storage medium ~~containing~~ comprising instructions for:

receiving a selection of a master file on a master client device;

defining a replication property of the file to indicate its selection for replication;

receiving a selection of at least one replication option for the master file, wherein the each replication option is a replication level option indicating an associated portion of the master file to be replicated and wherein each replication option is associated with a security option for controlling replication of the associated portion of the master file, wherein the associated portion of the master file is indicated on a paragraph by paragraph level, a section by section level or a page by page level;

creating a first replica file on the server device based upon the master file in conformance with the at least one replication option;

~~upon an event that~~ when the first replica file is ~~one of~~ created ~~and~~ or deleted, providing a notification to a user, wherein the notification is display of an icon or removal of an icon;

receiving at least one change made to the master file;

upon an event, synchronizing changes made at the master file to the first replica file;

applying a server mastered replication scheme to the replica file on the server with respect to each of at least one replicating client device; and

synchronizing the first replica file on the master client device to the master file on the master client device using a conflict resolution scheme.

60. (Currently Amended) The computer readable storage medium of claim 59, further ~~containing~~ comprising instructions for:

replicating the first replica file to a each of at least one second replica file respectively on each of the at least one replicating client devices;

receiving at least one change made to a second replica on an associated replicating client;

replicating the at least change on the associated replicating client to the replica on the server.

61. (Currently Amended) The computer readable storage medium of claim 59, further containing comprising instructions for:

- replicating the master file to the server device; and
- replicating the master file on the server to the first replica file.

62. (Currently Amended) The computer readable storage medium of claim 59, further containing comprising instructions for:

- replicating the first replica file to the master client;
- synchronizing the first replica file to the master client file using a conflict resolution scheme.

63. (Currently Amended) The computer readable storage medium of claim 59, wherein the event is ~~one of~~ an expiration of a time interval ~~and or~~ a request from the server.

64. (Currently Amended) The computer readable storage medium of claim 59, further containing comprising instructions for:

- receiving by the master client computing device from the connected server a copy of the change; and
- determining whether to replicate the change from the first replica to the master file.

65. (New) A system comprising:

- a processor operative to execute computer-executable instructions; and
- memory having stored therein computer-executable instructions for performing a process comprising:
 - receiving a selection of a master file on a master client device;
 - defining a replication property of the file to indicate its selection for replication;
 - receiving a selection of at least one replication option for the master file, wherein each replication option is a replication level option indicating an associated

portion of the master file to be replicated and wherein each replication option is associated with a security option for controlling replication of the associated portion of the master file, wherein the associated portion of the master file is indicated on a paragraph by paragraph level, a section by section level or a page by page level;

creating a first replica file on the server device based upon the master file in conformance with the at least one replication option;

when the first replica file is created or deleted, providing a notification to a user, wherein the notification is display of an icon or removal of an icon;

receiving at least one change made to the master file;

upon an event, synchronizing changes made at the master file to the first replica file;

applying a server mastered replication scheme to the replica file on the server with respect to each of at least one replicating client device; and

synchronizing the first replica file on the master client device to the master file on the master client device using a conflict resolution scheme.

66. (New) The system of claim 65, wherein the process further comprises:

replicating the master file to the server device; and

replicating the master file on the server to the first replica file.

67. (New) The system of claim 65, wherein the process further comprises:

replicating the first replica file to the master client;

synchronizing the first replica file to the master client file using a conflict resolution scheme.

68. (New) The system of claim 65, wherein the event is an expiration of a time interval or a request from the server.

69. (New) The system of claim 65, wherein the process further comprises:
receiving by the master client computing device from the connected server
a copy of the change; and
determining whether to replicate the change from the first replica to the
master file.

Allowable Subject Matter

2. Claims 43 – 48, and 59 - 69 are allowed over the prior art of record.
3. The following is an examiner's statement of reasons for allowance:

The prior arts of record, (Terry et al) discloses relational databases that can be fully replicated at any number of sites. Each application generally has its own database(s). Application programs, also called "clients", can read from and write to any single replica of a database. Once a replica accepts a write operation, this write is performed locally and propagated to all other replicas via Bayou's pair-wise reconciliation protocol. This "update-anywhere" replication model, permits maximum availability since applications can continue to operate even if some replicas are unavailable due to machine failures or network partitions; and (Takaya) discloses an automatic delivery system for master files in a distributed system that includes a parent workstation, a master file updating section for updating master files, a delivery start notifying section for forwarding the directory list of master files to a child workstation and a master delivery section for forwarding data or information requested by the child workstation. The child workstation has a slave file updating section for updating slave files, an updated asset registering section for forwarding updated data to the master

files and a slave delivery section for comparing the contents of the directory list of the master files and those of the directory list of the slave files and requesting the parent workstation to forward the data or information, which is found different; However, neither Terry nor Takaya taken alone or in combination teaches or suggests creating a first replica file on a server device based upon a master file, applying a server mastered replication scheme to the replica file on the server with respect to each of at least one replicating client device and synchronizing the first replica file on the master client device to the master file on the master client device using a conflict resolution scheme as recited in the independent claim 43 and similar limitation of independent claims 59 and 65.

The dependent claims, being definite, further limiting, and fully enabled by the specification are also allowed.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED I. EHICHIOYA whose telephone number is (571)272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre M. Vital can be reached on 571-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred I. Ehichioya/
Examiner, Art Unit 2169

October 10, 2008

/Pierre M. Vital/
Supervisory Patent Examiner, Art Unit 2169